

**REMARKS**

Entry of the foregoing, reexamination and reconsideration of the subject application, pursuant to and consistent with 37 C.F.R. § 1.114, are respectfully requested in light of the remarks which follow.

In the Advisory Action mailed on May 21, 2009, with regard to Applicants argument in connection with amended claim 5, the Examiner stated:

. . . Hopewell in figure 3 teaches a sequence comprising SEQ ID NO 24 and Hogan teaches methods of designing probes. Thus the combination of Huang, Haselback, Hogan and Hopewell do render the instant claims obvious.

ADVISORY ACTION at 3. In other words, the Examiner is basically arguing that one of ordinary skill in the art would have been motivated to use the sequence taught by Hopewell to design probes by Hogan's method of probe design to identify mutations that result in methicillin resistance because Hopewell teaches this is a serious medical problem and proper identification would allow efficient treatment. However, it must be noted that methicillin resistance is not due to mutations in the gyrase enzymes. As a matter of fact, this resistance is due to the SSCmec cassette, whereas the resistance afforded by gyrase mutations is expressed against quinolone antibiotics.

Thus, nothing in the combination of Huang, Haselbeck, Hogan and Hopewell indicates that exactly SEQ ID NO: 24 should be selected in order to design a *S. aureus* specific probe that would be useful in a diagnostic method for detecting and identifying infection causing bacterial species from clinical samples, wherein a mixture of DNA primers comprises a DNA primer consisting of the sequence identified with SEQ ID NO:76 and a DNA primer consisting of the sequence identified with SEQ ID NO: 77.

**CONCLUSION**

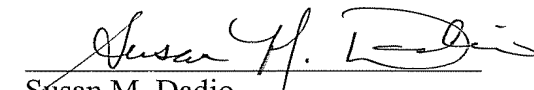
In view of the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order. Such action is earnestly solicited.

In the event that there are any questions relating to this Supplemental Amendment, or the application in general, it would be appreciated if the Examiner would telephone the undersigned attorney concerning such questions so that prosecution of this application may be expedited.

Respectfully submitted,

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